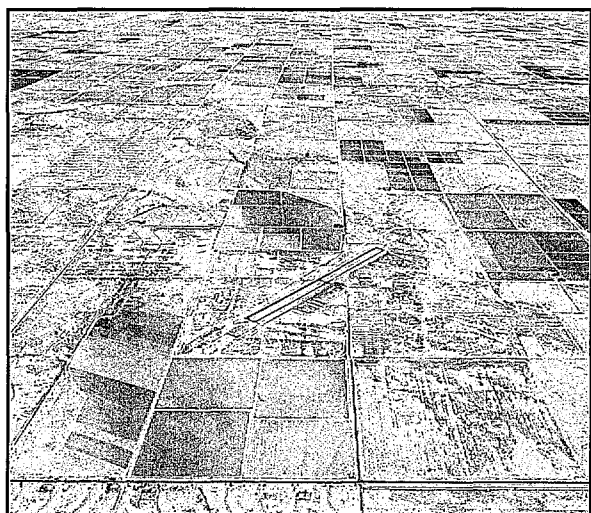




Chapter One INVENTORY

INVENTORY



The initial step in the preparation of the airport master plan update for the Eloy Municipal Airport is the collection of information pertaining to the airport and the area the airport serves. This chapter assembles collected information which will be used in subsequent analyses in this study. Within this chapter is an inventory of existing airport facilities, area airspace, and air traffic control. Additionally, background information regarding the City of Eloy and the regional area is collected. This includes information regarding the airport's role in state and national aviation systems, surface transportation, and the socioeconomic profile.

The information outlined in this chapter provides a foundation, or starting point, for all subsequent chapters. Therefore, it is essential that a complete and accurate inventory is conducted since the findings

and assumptions made in this plan are dependent on information collected. The information outlined in this chapter was obtained through on-site inspections of the airport, interviews with City staff and airport tenants, and documents provided by the Federal Aviation Administration (FAA), Arizona Department of Transportation, Aeronautics Division (ADOT), and the City of Eloy.

REGIONAL SETTING

Located in the south-central portion of Pinal County, Arizona, the City of Eloy is part of the more than 100,000 acres which comprise the Santa Cruz River Valley. The Santa Cruz River Valley supports a broad range of agricultural activities ranging from cotton, grains, vegetables, and citrus crop production to cattle ranching. The Casa Grande Mountains, Silver Reef Mountains, Sawtooth Mountains, and Picacho Mountains surround the City.



Exhibit 1A depicts the location of the Airport and the City of Eloy in their regional and national setting. Eloy is located midway between the major metropolitan areas of Phoenix and Tucson. Phoenix is approximately 60 statute miles to the north while Tucson is approximately 55 statute miles to the south. Interstate Highways 10 and 8 converge just a few miles west of Eloy. Interstate Highway 10 is a major east-west highway extending between Jacksonville, Florida and Los Angeles, California linking major U.S. cities from coast to coast. Interstate Highway 8 originates at the I-10 junction and extends to San Diego, California.

Eloy Municipal Airport is located on approximately 90 acres three miles northwest of the City's central business core. The Airport is accessed via Tumbleweed Road which terminates at the Airport entrance. Lear Drive extends along the south side of Airport property and provides access to the T-hangar facilities.

THE AIRPORT'S SYSTEM ROLE

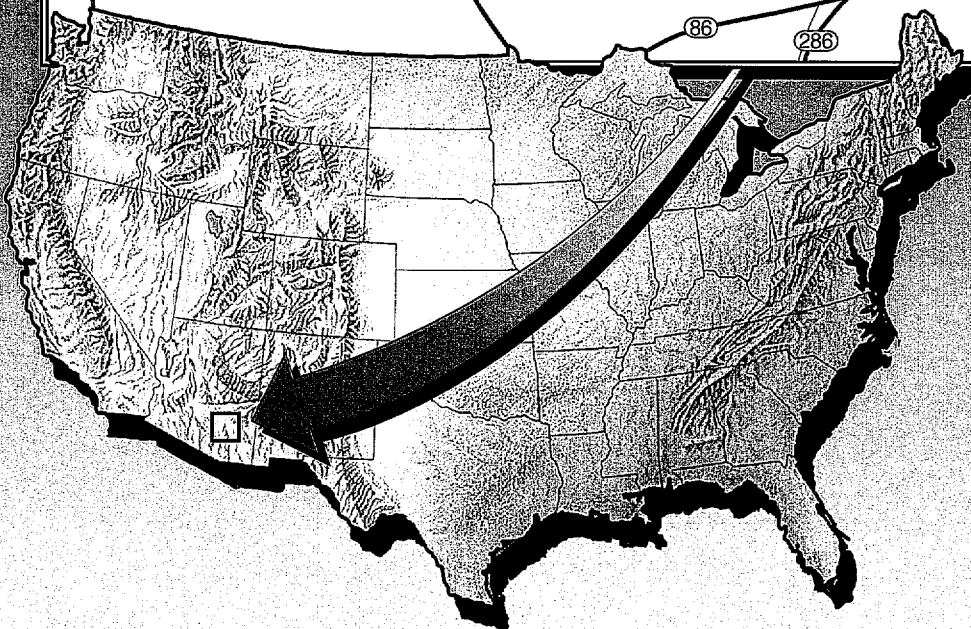
Airport planning exists on many levels: local, regional, state, and national. Each level has a different emphasis and purpose. This master plan is the primary local airport planning document. At the state level, the Airport is included in the *Arizona State Aviation System Plan (SASP)*. The purpose of the *SASP* is to ensure that the State has an adequate and efficient system of airports to serve its aviation needs well into the 21st century. The *SASP* defines the specific

role of each airport in the State's aviation system and establishes funding needs. Through the State's Continuous Aviation System Planning Process (CASPP), the *SASP* is updated every five years. The most recent update to the *SASP* is the 1995 *Arizona State Aviation Needs Study (SANS)*. The purpose of the *SANS* is to provide policy guidelines that promote and maintain a safe aviation system in the State, assess the State's airport capital improvement needs, and identify resources and strategies to implement the plan. The 1995 *SANS* included all public and private airports and heliports in Arizona which are open to the public, including American Indian and recreational airports.

At the national level, the Airport is included in the *National Plan of Integrated Airport Systems (NPIAS)*. The *NPIAS* includes a total of 3,660 airports (both existing and proposed) which are important to national air transportation. Eloy Municipal Airport is one of forty-six general aviation airports in Arizona included in the *NPIAS*. The *NPIAS* also includes estimates on the total development needs of the nation's airports which are eligible for federal funding assistance.

PREVIOUS MASTER PLAN

The previous airport master plan was completed in 1988 and included recommendations for an 800-foot extension of the runway and parallel taxiway, additional exit taxiways between each runway end and the midfield taxiway, the installation of a visual glide slope indicator (VGSI) at



ELOY
MUNICIPAL
AIRPORT

Exhibit 1A
LOCATION MAP

each runway end, and additional T-hangar and corporate (conventional) hangar development. The purchase of 2.0 acres of land adjacent to the south portion of the apron was recommended to accommodate the expansion of the existing T-hangar buildings and for corporate (conventional) hangar development.

HISTORICAL PERSPECTIVE

Eloy Municipal Airport was constructed in 1969 with assistance from the Federal Aid to Airports Program. Initial construction included a lighted 3,000-foot long by 60-foot wide asphalt runway, and 300-foot by 150-foot aircraft parking apron. The Airport served as a primary training base for Air Force T-41 aircraft for several years after initial construction. During the period the Air Force used the Eloy Municipal Airport, they constructed a terminal building which still remains in use. Crop dusting operations were the dominate use at the Airport through the late 1970's and 1980's. Skydive Arizona located at Eloy Municipal Airport in the early 1990's.

Over the past decade a number of improvement projects have been completed at the Airport with state and federal assistance. In 1986-87 a surface treatment was applied to the runway and parallel taxiway pavement surfaces, an 11,000-square yard portion of the apron was reconstructed, and taxiway access was constructed to the T-hangars. In 1987-88, federal and state grants were used for the previous master plan update. In 1988-89, a state grant was used for the acquisition of the Runway 2

runway protection zone. A surface treatment was applied to the runway, taxiways, and apron again in 1993 with state assistance. In 1994, drainage and erosion control improvements were funded with state and federal grants. In 1995-96, state grants funded this master plan update and an Environmental Assessment (which will be completed concurrently with this master plan update), and additional drainage and erosion control improvements.

AIR TRAFFIC ACTIVITY

At airports serving general aviation, the number of based aircraft and the total annual operations (takeoffs and landings) are the primary indicators of aeronautical activity. Historical based aircraft and annual operations data will be used in subsequent analyses in this master plan update to project future aeronautical activity and determine future facility needs.

TABLE 1A
Historical Based Aircraft and Operations
Estimates

Year	Based Aircraft	Annual Operations
1979	22 ¹	9,000 ¹
1988	27 ²	16,900 ²
1994	21 ³	N/A
1995	25 ³	24,623 ⁴
1996	22 ³	52,000 ⁵

¹ Eloy Municipal Airport Master Plan, Johannessen & Girard Consulting Engineers, October 26, 1979

² Eloy Municipal Airport Master Plan Update, Turner, Collier & Braden Inc., November, 1988

³ ADOT

⁴ 1995 SANS

⁵ Coffman Associates

Table 1A summarizes historical-based aircraft at Eloy Municipal Airport and is based on registered aircraft which may or may not actually be based at the Airport. As reported by ADOT and recorded in previous master plan documents, based aircraft totals at Eloy Municipal Airport increased during the period from 1979 to 1988. Based aircraft totals have since declined after increasing slightly in 1995. Based on existing hangar space (which includes 12 T-hangar facilities and 5 conventional hangars) and aircraft tiedown trends as observed by Aero Specialist (which includes 5-7 aircraft regularly tied down), the based aircraft totals as reported by ADOT closely approximate the number of aircraft utilizing on-airport facilities. As many as 18 additional aircraft regularly use Eloy Municipal Airport. Ag-Aero, Al-Don Dusting, and Sky Dive Arizona each operate aircraft at the Airport from facilities located off of Airport property.

Annual aircraft operations at Eloy Municipal Airport have not regularly been counted. Instead, only estimates of historical and current activity is available. Based upon annual operational estimates provided by Skydive Arizona, Ag-Aero, and Al-Don Dusting; and including a factor for based aircraft and itinerant aircraft operations, total operations in 1996 have been estimated at 52,000. Sky Dive Arizona, Ag-Aero, and Al-Don Dusting indicated that their 1996 operations did not vary significantly over previous years. Therefore, historical annual operational estimates may have understated actual annual operations at the Airport.

AIRPORT FACILITIES

Airport facilities can be functionally classified into two broad categories: airside and landside. The airside category includes facilities directly associated with aircraft operations. The landside category includes facilities necessary to provide the transition from surface to air transportation and support facilities necessary for the safe operation of the Airport.

AIRSIDE FACILITIES

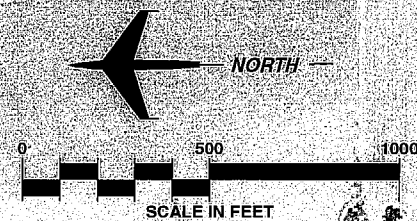
Airside facilities include runways, taxiways, and airport lighting. Within the discussion of airfield facilities is a presentation of the navigational and landing aids serving the Airport as well as area airspace and air traffic control. A depiction of the airside facilities at the Airport is provided on **Exhibit 1B**.

Runways

A single runway is available for use at the Airport: Runway 2-20. This runway is 3,900 feet long, 60 feet wide, oriented in a northeast-southwest direction, and constructed of asphalt. The *1995 State Aviation Needs Study (SANS)* lists the pavement strength at 12,000 pounds single wheel loading (SWL). Single wheel loading refers to the design of the aircraft landing gear which has a single wheel on each main landing gear strut. **Table 1B** summarizes runway data for the Airport.

LEGEND

- ① Fuel Storage
- ② Al-Don Dusting
- ③ Ag-Aero
- ④ T-Hangars
- ⑤ Hangar #1
DMI, Inc. (Rigging Innovations)
- ⑥ Hangar #2
Aero Communications Company
- ⑦ Hangar #3
High & Dry Balloons
- ⑧ Hangar #4
Para-Flite, Inc.
- ⑨ Hangar #5
Aero Specialist
- ⑩ Arizona Aeropainting



DATE OF PHOTO: 5-97

SKYDIVE ARIZONA

LEAR DRIVE

TUMBLEWEED ROAD

AIRPORT PROPERTY LINE
EXISTING RUNWAY 3900' X 60'



TABLE 1B
Runway Data

	Runway 2-20
Length (feet)	3,900
Width (feet)	60
Surface Material	Asphalt
Load Bearing Strength (lbs)	12,000 SWL
Markings	Basic
Lighting	Medium Intensity

Taxiways

The taxiway system at the Airport includes a full-length parallel taxiway and three runway exit/entrance taxiways: one at each runway end and one located approximately midfield. The parallel taxiway serving Runway 2-20 is located 200 feet south of Runway 2-20. All taxiways are 40 feet wide. The City of Eloy constructed a taxiway in 1994 to provide access to privately-owned parcels of land located along the south side of the Airport. This taxiway is constructed of asphalt and extends approximately 1,000 feet from the southwest end of the apron, parallel with the runway.

Airfield Lighting

Airfield lighting systems extend an airport's usefulness into periods of darkness and/or poor visibility. A variety of lighting systems are installed at the Airport for this purpose. These lighting

systems, categorized by function, are summarized as follows:

Identification Lighting: The location of an airport at night is universally indicated by a rotating beacon. A rotating beacon projects two beams of light, one white and one green, 180 degrees apart. The rotating beacon at the Airport is located atop a metal tower along the east end of the aircraft parking apron.

Pavement Edge Lighting: Pavement edge lighting utilizes light fixtures placed near the pavement edge to define the lateral limits of the pavement. This lighting is essential for maintaining safe operations at night and/or during times of poor visibility in order to maintain safe and efficient access from the runway and aircraft parking areas. Medium intensity runway lighting (MIRL) is provided along Runway 2-20. Runway threshold lighting identifies each runway end. Taxiway pavement edge lighting is not available at the Airport.

Approach Lighting: An omnidirectional approach lighting system (ODALS) is installed at each runway end. An ODALS is a system of seven omnidirectional lights (two located on each side of the runway and 5 located in the approach area to the runway) which aid pilots in identifying the extended runway centerline and runway end at night and during poor weather conditions. Currently these systems are inoperable. Much of the wiring system has been destroyed by local wildlife.

Pavement Markings

Pavement markings aid in the movement of aircraft along airport surfaces. The basic markings to Runway 2-20 are in good condition, and identify the runway centerline and designation. Taxiway and apron taxilane centerline markings are provided to assist aircraft using these airport surfaces. Pavement markings also identify aircraft parking positions.

Navigational Aids

Navigational aids are electronic devices that transmit radio frequencies which properly equipped aircraft and pilots translate into point-to-point guidance and position information. Three types of electronic navigational aids are available for aircraft enroute to the Airport - the Very High Frequency Omnidirectional Range (VOR) facility, Loran-C, and Global Positioning System (GPS).

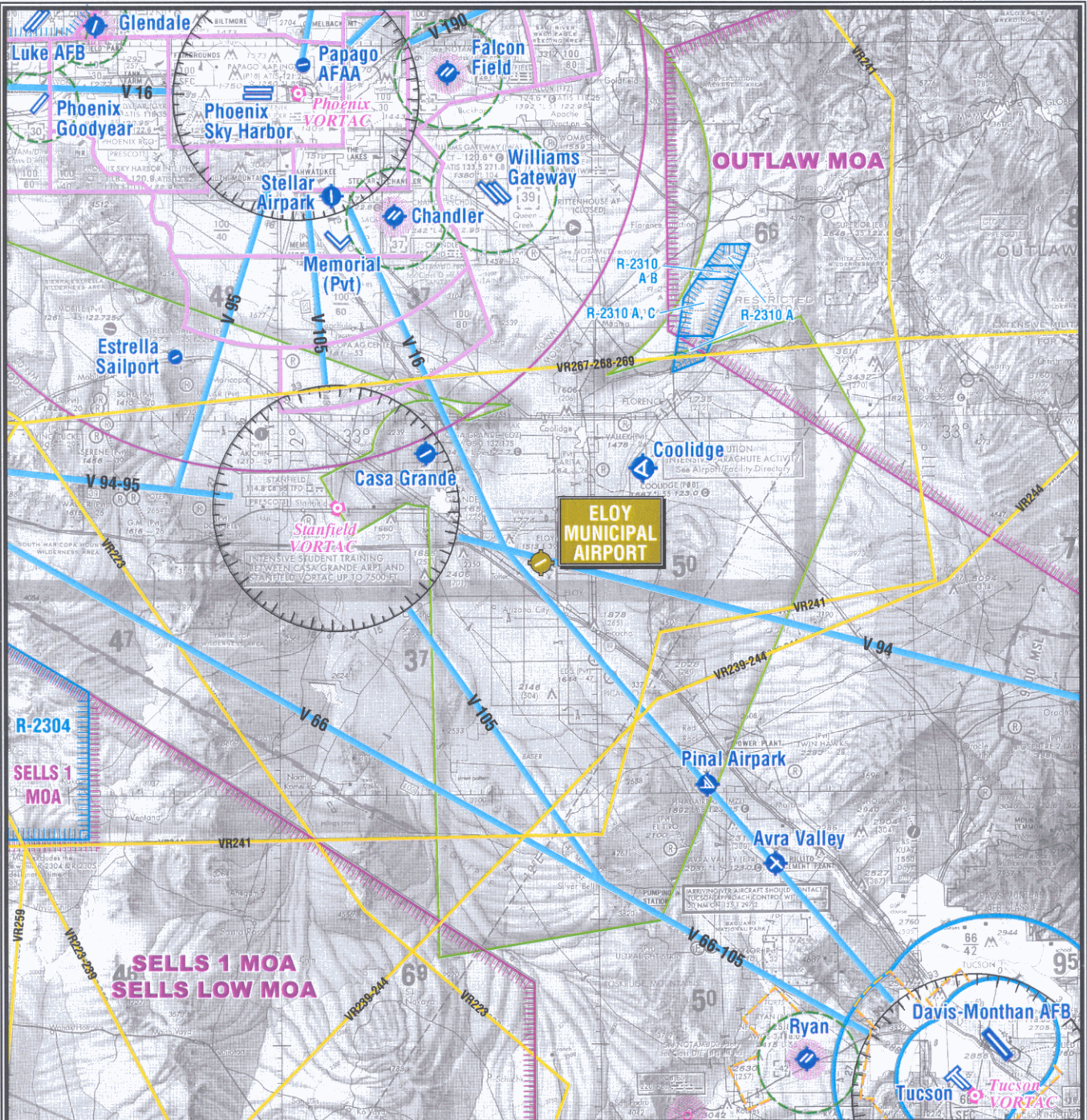
The VOR, in general, provides azimuth readings to pilots of properly equipped aircraft by transmitting a radio signal at every degree to provide 360 individual navigational courses. Frequently, distance measuring equipment (DME) is combined with a VOR facility to provide distance as well as direction information to the pilot. In addition, military TACAN and civil VOR's are commonly combined to form a VORTAC. A VORTAC provides distance and direction information to civil and military pilots. Pilots flying to or from the Airport can utilize the Stanfield VORTAC located 17 miles northwest of the Airport. **Exhibit 1C**, a map of the

regional airspace system, depicts the location of the Stanfield VORTAC.

Loran-C is a ground-based enroute navigational aid which utilizes a system of transmitters located in various locations across the continental United States. LORAN-C varies from the VOR as pilots and aircraft are not required to navigate using a specific facility (with the VOR, pilots must navigate to and from a specific VOR facility). With properly equipped aircraft, pilots using Loran-C can directly navigate to any airport in the United States.

GPS is an additional enroute navigational aid for pilots enroute to the airport. GPS was initially developed by the United States Department of Defense for military navigation around the world. Increasingly, over the last few years, GPS has been utilized more in civilian aircraft. GPS uses satellites placed in a fixed orbit around the globe to transmit electronic signals which properly equipped aircraft use to determine altitude, speed, and navigational information. GPS is similar to Loran-C in that pilots do not have to navigate to or from a specific navigational facility. GPS provides the greatest level of accuracy of all enroute navigational aids.

The FAA is proceeding with a program to gradually replace all traditional enroute navigational aids with GPS over the next decade. The FAA phase-out schedule for traditional navigational aids includes VOR's between 2005 and 2010, and Loran-C by the year 2000.



LEGEND

- | | | | |
|--|---|--|--|
| | Hard-surfaced runways 1500 ft. to 8069 ft. | | Prohibited, Restricted, Warning and Alert Areas |
| | Hard-surfaced runways greater than 8069 ft. or some multiple runways less than 8069 ft. | | Military Operations Area (MOA) |
| | VORTAC | | Class B Airspace |
| | Non-Directional Radiobeacon (NDB) | | Class C Airspace |
| | Compass | | Class D Airspace |
| | Victor Airways | | Class E Airspace |
| | Military Training Routes | | Class E Airspace with floor 700 feet above surface |
| | | | MODE C |



NORTH

NOT TO SCALE



Instrument Approach Procedures

Instrument approach procedures are a series of predetermined maneuvers established by the FAA using electronic navigational aids that assist pilots in locating an airport during low visibility and cloud ceiling conditions. Currently, there are no instrument approach procedures to the Airport. Essentially, the Airport is closed to arrivals when weather conditions deteriorate to a point where visual flight can no longer be conducted. Existing VFR approach minimums at the Airport are 1-mile visibility minimum with a ceiling height of 400 feet.

The FAA is proceeding with an aggressive program to establish 500 new instrument approaches each year at airports across the nation using GPS. Since GPS does not require expensive ground-based equipment for the transmission of electronic navigational signals, GPS instrument approaches can be developed to almost every airport and at a low cost. The facility needs evaluation (Chapter 3) will examine the various requirements for establishing GPS instrument approaches at the Airport.

Area Airspace

To ensure a safe and efficient airspace environment for all aspects of aviation, the FAA has established an airspace structure that regulates and establishes procedures for aircraft using the National Airspace System. The U.S. airspace structure provides for two basic categories of airspace, controlled and

uncontrolled, and identifies them as Classes A, B, C, D, E, and G.

Class A airspace is controlled airspace and includes all airspace from 18,000 feet mean sea level (MSL) to Flight Level 600 (approximately 60,000 feet MSL). Class B airspace is controlled airspace surrounding high activity commercial service airports (i.e. Phoenix Sky Harbor International Airport). Class C airspace is controlled airspace surrounding lower activity commercial service (Tucson International Airport) and some military airports (Davis-Monthan Air Force Base). Class D airspace is controlled airspace surrounding airports with an air traffic control tower. All aircraft operating within Class A, B, C, and D airspace must be in contact with the air traffic control facility responsible for the particular airspace. Class E airspace is controlled airspace that encompasses all instrument approach procedures and low altitude federal airways. Only aircraft conducting instrument flights are required to be in contact with air traffic control when operating in Class E airspace. While aircraft conducting visual flights in Class E airspace are not required to be in radio communication with air traffic control facilities, visual flight can only be conducted if minimum visibility and cloud ceilings exist. Class G is uncontrolled airspace.

Exhibit 1C depicts the airspace in the vicinity of the Airport. Airspace in the vicinity of the Airport is impacted by the large number of military operations conducted in the area. Northeast and southwest of the Airport are large areas

of special-use airspace designated as Military Operations Area (MOA's). MOA's define areas of high level military activity and are intended to segregate military and civilian aircraft. While civilian operations are not restricted within an MOA, civilian aircraft are cautioned to be alert for military aircraft when operating in the MOA. The outer limits of the Outlaw MOA is located approximately 22 nautical miles northeast of the Airport. Military operations within the Outlaw MOA are normally conducted between 7:00 a.m. and 6:00 p.m. Monday through Friday from 3,000 feet above ground level (AGL) or 8,000 feet above mean sea level (MSL), whichever is higher. The Outlaw MOA also operates intermittently on weekends and between 8:00 p.m. and 10:00 p.m. Monday through Friday. The outer limits of the Sells 1 MOA and Sells Low MOA are located approximately 27 miles southwest of the Airport. Military operations within the Sells 1 MOA are conducted between 6:00 a.m. and 7:00 p.m. Monday through Friday at altitudes above 10,000 feet mean sea level (MSL). Military operations within the Sells Low MOA are normally conducted between 6:00 a.m. and 7:00 p.m. Monday through Friday between 3,000 AGL to 10,000 feet MSL.

Restricted airspace is located both to the northeast and southwest of the Airport. Restricted airspace surrounds areas of significant hazard to aircraft operations such as artillery firing, aerial gunnery, or guided missiles. While civilian aircraft operations are not prohibited in restricted area, aircraft operations are restricted during the specified times and between the defined altitudes.

Restricted areas R-2310 A, B, and C are located approximately 20 miles northeast of the and operate intermittently and at altitudes between 10,000 and 35,000 feet MSL. Restricted area R-2304 is located approximately 40 miles southwest of the Airport and operates between 7:00 a.m. and 10:00 p.m. at altitudes to Flight Level 240 (approximately 24,000 feet MSL). Military Training Routes are located near the Airport as well. Military jets travel on these routes at altitudes above 10,000 feet and at speeds in excess of 250 knots. A system of Federal Airways, referred to as Victor Airways, has been established across the nation for aircraft using VOR navigational facilities. Victor airways are corridors of airspace eight miles wide that extend upward from 1,200 feet above the ground to 18,000 feet MSL and extend between VOR navigational facilities. Victor Airways in the vicinity of Eloy Municipal Airport emanate from the Stanfield VORTAC and are identified on **Exhibit 1C**.

Air Traffic Control

Although there is no air traffic control tower on the Airport, the unicom frequency of 122.8 is used by aircraft in the vicinity of the Airport to obtain airport information and advise other aircraft of their position and intentions. For aircraft arriving and departing the Airport, and in the enroute phase of their flight, route guidance assistance is available from the Albuquerque Air Route Traffic Control Center (ARTCC). The Albuquerque ARTCC controls aircraft in a large multi-state area.

Area Airports

There are a number of airports of various sizes, capacities, and functions near Eloy Municipal Airport. Generally, airports which have any significant influence to an airport similar to Eloy Municipal Airport are in approximately a 30 nautical mile range of the airports. The airports described below are those within approximately 30 nautical miles of the Airport and are important to the airspace and air traffic control environment of the area. Historical based aircraft and operations data was obtained from the 1995 State Aviation Needs Study (SANS).

Marana Northwest Regional Airport (formerly Avra Valley Airport) is located 30 miles southeast of the Airport near Tucson. Two runways are available for use: Runways 12-30 and 3-21. Runway 12-30 is 6,900 feet long, 100 feet wide, and equipped with Runway End Identifier Lighting (REIL's). Runway 3-21 is 4,200 feet long, 75 feet wide and equipped with medium intensity pavement edge lighting, REIL's, and visual approach slope indicators (VASI's). Extensive parachute jumping is conducted at the Airport. In 1995, there were 151 based aircraft and approximately 30,000 operations at **Marana Northwest Regional Airport**.

Casa Grande Municipal Airport is located approximately 17.4 nautical miles north of Eloy Municipal Airport. Runway 5-23 is 5,200 feet long, 100 feet wide, constructed of asphalt, and equipped with medium intensity runway lighting. A medium intensity approach lighting

system with runway alignment lighting (MALSR) is installed to the Runway 5 end. VASI's are installed to both runway ends. An instrument landing system (ILS) and VOR instrument approach aid pilots during inclement weather conditions. An automated weather observation station is located at the Airport. In 1995, there were 44 based aircraft and approximately 87,000 operations at the Casa Grande Municipal Airport.

Chandler Municipal Airport is located 30 miles northeast of Eloy Municipal Airport. Owned and operated by the City of Chandler, the Airport is equipped with two parallel runways. Runway 4R-22L is 4,850 feet long, 75 feet wide, and equipped with REIL's and precision approach path indicators (PAPI's) to each runway end. Runway 4L-22R is 4,395 feet long, 75 feet wide, and equipped with VASI's. A nondirectional beacon (NDB) and VOR or GPS approach aid pilots during poor weather conditions. There are 254 aircraft based at Chandler Municipal Airport. The Airport is served by an air traffic control tower and on-site NDB.

Coolidge Municipal Airport is located 10 miles northeast of the Airport. Two runways are available for use. Runway 5-23 is 5,500 feet long, 150 feet wide, and has pavement strength capable of accommodating the full-range of general aviation aircraft. Runway 17-35 is 3,740 feet long, 75 feet wide, and serves primarily small general aviation aircraft. GPS and VOR/DME approaches aid pilots during poor weather conditions.

Memorial Airfield is located 29 nautical miles northwest of Eloy Municipal Airport. The Airport is served by a single runway (Runway 12-30) which is 8,577 feet long. There were 27 based aircraft and approximately 2,300 operations at Memorial Airfield in 1995.

Pinal Airpark is located approximately 22 nautical miles south of the Eloy Municipal Airport near Marana, Arizona. Runway 12-30 is 6,860 feet long, 150 feet wide, constructed of asphalt, and is equipped with medium intensity runway lighting. In 1995, there were 22 based aircraft and approximately 9,000 operations at Pinal Airpark. The Silver Bell Army Heliport and Western Army National Guard Aviation Training Site Facility are located adjacent to the north end of Pinal Airpark. Pinal Airpark is used extensively for military helicopter training operations.

Williams Gateway Airport, located 30 nautical miles northeast of Eloy Municipal Airport, is owned and operated by the Williams Gateway Airport Authority. The Airport is served by three parallel runways with 12R-30L providing the greatest runway length (10,401 feet long by 150 feet wide). The Airport can serve the full-range of civilian and military aircraft. VOR and ILS instrument approaches aid aircraft during poor weather conditions. The Airport is a recently converted Air Force Base and plans currently call for the Airport to serve air carrier, general aviation, and cargo operators. In 1995, there were 50

based aircraft and approximately 37,000 annual operations.

LANDSIDE FACILITIES

Landside facilities include: aircraft storage hangars, the aircraft parking apron, and fuel facilities. Landside facilities at the Airport are identified on **Exhibit 1B**. This discussion of landside facilities includes a description of current airport tenants and "through the fence" operators (located on property not owned by the City).

On-Airport Aircraft Storage Facilities

Aircraft storage is available in two 6-unit T-hangars and 5 conventional hangars at the Airport. All hangars facilities are owned by the City of Eloy. Each aircraft storage facility and total area available in each hangar facility is summarized in **Table 1C**.

Table 1C Aircraft Storage Facilities	
Hangar Facility	Area (Square Footage)
Hangar #1	9,744
Hangar #2	3,000
Hangar #3	5,120
Hangar #4	3,575
Hangar #5	3,300
T-hangar	7,200
T-hangar	7,200

Aircraft Parking Apron

An 18,000 square yard aircraft parking apron is available for aircraft movement and tiedown at the Airport. There are approximately 36 aircraft tiedown positions located on the apron.

General Aviation Services

Aero Specialist, through a contract with the City of Eloy, provides the only on-airport general aviation services, which includes operating the unicom and providing line services and aircraft fuel. Aero Specialist is owned and operated by Larry Hill of Skydive Arizona. General aviation services are provided from Hangar #5. Public restroom facilities, vending, a public telephone, and a flight planning area are available along the east side of the hangar.

Airport Tenants

DMI, Inc. (Rigging Innovations) leases Hangar #1 (the old Air Force Terminal Building) for use in manufacturing parachutes.

Aero Communications Company leases Hangar #2 and installs and repairs aircraft radios and conducts aircraft salvage.

High and Dry Balloons leases Hangar #3 to support its balloon business.

Para-Flite Inc. leases Hangar #4 for the storage of its parachute systems.

"Through-the-Fence" Operations

Access to airfield facilities is available for the following companies which are located on private property adjacent to the Airport: Skydive Arizona, Al-Don Dusting, Ag-Aero, and Arizona Aeropainting.

Skydive Arizona, one of the largest skydiving facilities in the country, is located adjacent to the east side of the Airport. Access to the airfield is available via a taxiway connecting to the east side of the apron. Skydive Arizona operates one Douglas DC-3, three Shorts Skyvans, four DHC-6 Twin Otters, and one Pilatus/Fairchild PC-6 Porter.

Al-Don Dusting conducts crop dusting from a facility located south of the T-hangars and accesses the Airport via a gate located between the T-hangars. Al-Don Dusting operates three Schweizer Ag-cats.

Ag-Aero conducts crop dusting from a facility located along the recently constructed city-owned taxiway and operates one Cessna Husky and two Turbine-Thrush.

Arizona Aeropainting provides aircraft painting services from a hangar located west of Ag-Aero along the recently constructed city-owned taxiway.

On-Airport Fuel Storage

The City of Eloy owns and maintains a self service fuel storage facility located

along the apron between Hangars 1 and 5. Fuel is dispensed through a "card lock" system which requires a credit card to operate. Separate 6,000 gallon tanks store 100LL Avgas and Jet-A fuel. This system replaced the previous city-owned underground storage tank. The State Fire Marshall inspected the system in May, 1997 and found it to be in full compliance with State Fire Codes.

SOCIOECONOMIC PROFILE

For an airport master plan, socioeconomic characteristics are collected and examined to derive an understanding of the dynamics of growth in the local and regional area. Socioeconomic factors which have an impact on aviation demand, and can be used to correlate local trends to future aviation demand include: population, income, and employment. Historical and forecast population, income, and employment data for the City of Eloy, Pinal County, and the State of Arizona

was obtained from the U.S. Department of Commerce, Regional Economic Information System, and Arizona Department of Economic Security for use in this study.

Population

Historic population estimates for the City of Eloy, Pinal County, and the State of Arizona for 1980, 1990, and 1995 are summarized in **Table 1D**. The population in the City of Eloy has grown steadily since 1980, increasing at an annual rate of 2.4 percent. Pinal County's total population has grown steadily over the same period as well, but at a pace stronger than experienced in the City of Eloy. Pinal County's total population has grown by more than 48,000 persons since 1980, an average annual growth rate of 2.8 percent. The population for the State of Arizona grew by more than 1.5 million persons over the same period (an average annual growth rate of 2.9 percent).

TABLE 1D
Historical Population
City of Eloy, Pinal County, State of Arizona

	1980	1990	1995	Avg. Annual Growth Rate
City of Eloy	6,240	7,211	8,915	2.4 %
Pinal County	90,918	116,379	139,050	2.8 %
State of Arizona	2,716,546	3,665,228	4,228,900	2.9 %

Source: *Eloy Community Profile*, Arizona Department of Commerce

Per Capita Personal Income

A comparison of historic per capita personal income (PCPI) for Pinal County and the State of Arizona for 1984 and 1994 is summarized in **Table 1E**. The

1994 Pinal County PCPI of \$14,235 ranked tenth in the state and was 74.3 percent of the state average (\$19,147). In 1984, the Pinal County PCPI of \$8,887 ranked tenth in the state and was 72.3 percent of the state average (\$12,284). The Pinal

County PCPI has grown at an average annual rate of 4.8 percent over the past 10 years, while the state PCPI has

averaged an annual growth rate of 4.5 percent.

TABLE 1E

**Historical Per Capita Personal Income
Pinal County, State of Arizona**

	1984	1994	Avg. Annual Growth Rate
Pinal County	\$8,887	\$14,235	4.8 %
State of Arizona	\$12,284	\$19,147	4.5 %

Source: U.S. Department of Commerce

Employment

Historic population by industry for Pinal County is summarized in **Table 1F**. Total employment has grown from 25,851 in 1970 to 47,515 in 1994. This comparison illustrates the strong agricultural and mining employment base in Pinal County as well as the overall decline in these industries over the past 25 years. Total farm employment has declined by 411 since 1970, an average annual decline of 0.5 percent. Total mining employment has declined by 2,553 since 1970, an average annual decline of 2.2 percent. This comparison also illustrates the gradual transition from an agricultural and mining employment base to a

growing manufacturing and services oriented employment base within the county. Total manufacturing employment has grown from 1,481 in 1970 to 4,490 in 1994, an average annual growth rate of 4.7 percent. Total employment within the services sector has grown from 2,780 in 1970 to 8,956 in 1994, an average annual growth of 5.0 percent. The strongest growth industry is wholesale trade which has grown at an average annual rate of 7.1 percent from 213 in 1970 to 1,774 in 1994. Local, county, state, and federal governments remain as the largest employers in the county representing 28.8 percent of total employment.

TABLE 1F
Historical Total Employment by Industry – Pinal County

	1970	1975	1980	1985	1990	1994	Avg. Annual Growth Rate
Total Employment	25,851	31,388	31,785	33,492	41,423	47,515	2.6%
Farm	3,839	3,695	3,143	2,959	3,492	3,428	-0.5%
Mining	6,086	8,214	6,197	3,422	4,081	3,533	-2.2%
Construction	2,114	1,007	784	1,554	1,369	1,943	-0.4%
Manufacturing	1,481	2,483	2,714	3,088	3,683	4,490	4.7%
Transportation and Public Utilities	583	752	973	1,137	1,521	986	2.2%
Wholesale Trade	213	671	598	589	829	1,105	7.1%
Retail Trade	3,065	3,658	4,062	5,064	6,135	7,600	3.9%
F.I.R.E	677	1,001	1,391	1,624	1,880	1,774	4.1%
Services	2,780	3,252	4,139	5,258	7,195	8,956	5.0%
Government	5,013	6,655	7,784	8,797	11,238	13,700	4.3%

Source: U.S. Department of Commerce
F.I.R.E - Finance, Insurance, and Real Estate.

UTILITIES

Water services at the Airport are provided by the City of Eloy. Arizona Public Service provides electrical service. Natural Gas Service is provided by Southwest Gas. Sanitary sewer output is handled by septic tanks. Hangars 1 and 2 have separate septic tank systems. Hangars 3, 4, and 5 share a septic system. Presently, the main water lines serving the Airport are undersized, which has lead, most notably, to reduced fire flows. The City of Eloy plans to upgrade the main water line to the Airport in the next two years to improve fire flows and support future growth at the Airport. The City of Eloy also plans to construct a water treatment facility approximately two and one-half miles west of the Airport, which will ultimately provide the Airport with sanitary sewer services. This facility is currently under design.

SURROUNDING LAND USE

Presently, Eloy Municipal Airport is completed surrounded by undeveloped land, used mostly for agricultural purposes. Toltec is located approximately one mile southwest of the Runway 2 threshold. A mobile home park is located approximately one and a half miles northwest of the Airport.

CLIMATE

Typical of other southern Arizona cities, Eloy's climate is characterized by its warm, dry desert conditions. On average, the sun shines 86 percent of the time. The normal daily maximum temperature ranges from 65 degrees in January to 105 degrees in July. The average daily high is 85 degrees. The normal daily minimum temperature

ranges from 41 degrees in January to 81 degrees in July. The average daily low temperature is 59 degrees. Average annual precipitation is 8.5 inches with a majority of this falling during the warm summer months. See the Runway Orientation section in Chapter 3 for a discussion of ambient wind conditions relating to Runway 2-20 at Eloy Municipal Airport.

SUMMARY

The information discussed on the previous pages provides a foundation upon which the remaining elements of the master planning process will be constructed. This information will provide guidance when an evaluation of the Airport's facilities is undertaken (in Chapter 3) to determine the ability of the Airport to accommodate the projections of aviation demand (in Chapter 2).